DOCUMENT RESUME

ED 035 744 VT 010 131

AUTHOR	Larson, Milton E.; Crain, William
TITLE	Utilization of Competency Examinations in Vocational and Technical Education.
INSTITUTION	Colorado State Univ., Ft. Collins.
SPONS AGENCY	Colorado Research Coordinating Unit, Fort Collins.
PUB DATE	May 69
NOTE	33p.
EDRS PRICE	EDRS Price MF-$0.25 HC-$1.75
DESCRIPTORS	College Credits, *Equivalency Tests, *National Surveys, *Occupational Tests, Questionnaires, Teacher Certification, *Vocational Education Teachers, Work Experience
IDENTIFIERS	*Colorado

ABSTRACT

To assist Colorado in evaluating certification requirements, the study sought information about the utilization of competency examinations and the means by which certification is attained in the technical, trade and industrial, and business and office education services. Questionnaires were sent to the State Directors of Vocational Education in the 54 states and territories and to the individuals in charge of competency examinations in the 16 states which use such examinations. Ninety-eight percent of the questionnaires sent to directors and 89 percent of the questionnaires sent to the individuals in charge of competency examinations were returned. Some findings were: (1) 16 states administer competency examinations--all in trade and industrial, 12 in technical, two in business and office, and one in distributive education, (2) Five states have discontinued use of these examinations while seven others plan to begin their use, (3) Competency examinations were used for allowing college credit by 12 states and for credentialing by eight states, (4) Updating, developing, and scheduling were problems encountered, and (5) Only two respondents indicated that examination scores and years of experience were equated for certification purposes. Extensive additional data is presented in tabular form. (JK)

ED035744

Department of Vocational Education

Research Report

Colorado State University

Fort Collins

UTILIZATION OF COMPETENCY EXAMINATIONS

-

VOCATIONAL AND TECHNICAL EDUCATION

by

Milton E. Larson
and
William Crain

This research was supported by funds from the Research Coordinating Unit of Colorado and performed at Colorado State University, Ft. Collins, Colorado.

MAY 1969

ED035744

FOREWARD

We would like to express our thanks to the Colorado State Board For Community Colleges and Occupational Education for the financial support which helped make this study possible.

Our appreciation is also extended to those people who so willingly gave their assistance by supplying data for this study.

Director of Study: Dr. Milton E. Larson
Professor of Voc. Ed.
Colorado State University

Research Assistant: William Crain
Graduate Assistant
Department of Voc. Ed.
Colorado State University

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

TABLE OF CONTENTS

	Page
FORWARD	i
LIST OF TABLES	iii
INTRODUCTION	1
SUMMARY OF FINDINGS	2
CONCLUSIONS	6
REVIEW OF LITERATURE	7
TABLES	9
APPENDICES	19
ANNOTATED BIBLIOGRAPHY	28

LIST OF TABLES

Table		Page
I.	State Directors' Responses to the Use of Competency Examinations (Numbers)	10
II.	State Directors' Responses to the Use of Competency Examinations (Percentages)	11
III.	General Competency Examination Requirements, Extent of Use and Administration	12
IV.	Response of Respondents as to the Worth of the Exams	13
V.	Problems Encountered with the Examination Program	13
VI.	Operation of the Competency Examination Programs	14
VII.	Use of Competency Examinations for Certification	15
VIII.	Certification of Potential Teachers	16
IX.	Determiners for the Amount of College Credit Allowed	16
X.	Use of Competency Examinations for Awarding College Credit	17
XI.	How Examinations are Evaluated	18

INTRODUCTION

The demand for high quality, top rate, qualified persons to fill the openings for teachers of Technical, Trades and Industrial and Business and Office Education classes has outnumbered the supply of such persons. This problem is nation-wide and Colorado is no exception.

Colorado, as many states, is forced with an expanding vocational education program and the need for quality teachers to staff this program. In addition, Colorado is interested in evaluating its certification requirements and the means by which certification is attained in the service of Technical, Trades and Industry, and Business and Office Education. A survey of the other states was taken to ascertain what, if anything, was being used as a basis for certification other than a fixed time or amount of work experience and/or education.

Purpose of the Study

The objectives of this study were:

1. To review known, available, previous studies conducted in regard to Vocational-Technical teacher certification.

2. To obtain from State Directors and other key personnel information on what is being done nationally in regard to evaluating qualifications for certification of teachers or for college credits, specifically in the three above mentioned services.

3. To determine the usefulness of competency examinations for the purpose of teacher evaluation or the allowance of college credit as perceived by those states employing such exams.

Methodology

A review of available literature (see review of literature p. 7) concerning studies dealing with competency examinations and evaluation was accomplished. A survey instrument (see appendix, p. 19) was developed and sent to the State Directors of Vocational Education in 50 states, Washington D.C., Puerto Rico, Virgin Islands and Guam. Fifty-three forms were returned or about 98%. After tabulating and summarizing the results of this instrument a second instrument was developed and sent to the person in charge of competency examinations, as indicated by the State Director, for these states (16) indicating the use of such a testing program. Two states had multiple directors listed. Seventeen forms were returned or about 89%.

SUMMARY OF FINDINGS

The results of the questionnaire sent to State Directors are summarized in items 1-7 below.

Items 8-36 summarize the results obtained from the individuals in charge of competency examinations as indicated by the State Director in those states where such a program is in effect.

Further data obtained from both questionnaires may be found in the tables starting on p. 9.

In some cases it was necessary to edit the returns in order to assimilate the data to the problem. All percentages and means have been rounded to the nearest whole number.

1. Sixteen states (30%) indicated that they administered competency examinations to vocational teachers.

2. Responses from the other states indicated that 31 states (58%) had never used competency examinations and 5 (9%) had discontinued their use.

3. Nine states (56%) used the combination of written, oral and performance tests whereas written and performance tests were used in 4 (23%) of the states involved in a testing program.

4. The services in which competency examinations were used are:
   a. Technical - 12 states (75%)
   b. T & I - 16 states (100%)
   c. Business and Office Education - 2 states (13%)
   d. Distributive Education - 1 state (6%)

5. Competency examinations were used for allowing of college credit by 12 (75%) of the states and credentialing of vocational-technical teachers by 8 (50%) of the states.

6. Twenty-three states (43%) do not plan on using competency examinations within the next two years but 7 (13%) do. Of these 7 states, 6 will use the scores to allow college credit and 5 will use the scores to certify vocational-technical teachers.

7. The services in which competency examinations will be used by the 7 states planning to start such a program were:
   a. Technical - 5 states
   b. T & I - 7 states
   c. Business and Office Education - 3 states
   d. Health Occupations - 1 state

8. The range of the approximate number of competency examinations given each year were:
   a. Technical - 1 to 50
   b. T & I - 2 to 600
   c. Business and Office Education -2
   d. Distributive Education - 2 to 8

9. The teacher trainers, representatives from the State Department, the supervisor of proficiency testing and trade instructors were most frequently mentioned as the person, or group, who gave the examinations.

10. The range of prior work experience required before a person is allowed to take the competency examination varied from:
    a. Two to seven years for Technical
    b. Two to eight years for T & I
    c. One to two years for Business and Office Education
    d. Two to seven years for other special teachers

11. The problems encountered with the examination programs were described as: (a) up-dating by 9 respondents (53%), (b) developing the examinations by 4 respondents (24%), and (c) scheduling by 4 respondents (24%)

12. Competency testing programs have been in use from 1 to 50 years in the various states with a mean of 21 years.

13. This survey asked only for the number of different areas in Technical and T & I that presently used competency examinations. They were:

a. Technical - 1 to 60 with a mean of 8.
b. T & I - 2 to 70 with a mean of 20

14. The development of competency examinations was reported as having been accomplished by:
    a. The teacher trainers in the area - 11 respondents (65%)
    b. Representatives from business and industry - 8 respondents (47%)
    c. Advisory committees - 4 respondents (24%)

15. Returns from 7 respondents (41%) indicated competency examinations were up-dated at least every 5 years.

16. Ten respondents (59%) indicated that sometimes the sam person, or group, that developed the examination also did the up-dating.

17. Administration of the competency examination program was considered a proportionate part of their total load by 10 (59%) of the respondents.

18. Eight respondents (47%) indicated that their examination programs compensate other people who help with giving and evaluating the examinations on the basis of a flat rate per examination, whereas 4 respondents (24%) indicated there was no compensation and 4 respondents (24%) indicated that it was considered part of the teacher trainers duties.

19. The persons, or groups, most frequently listed as those who evaluate the various tests were:
    a. Seven respondents (41%) indicated that the teacher trainers evaluated the objective tests.
    b. Four respondents (24%) indicated that the examination team or committee evaluated the subjective tests.
    c. Performance tests were evaluated by trade teachers and the examination team or committee, each of which was indicated by 4 (24%) of the respondents

20. No fees were charged for taking a competency examination at 6 institutions (35%) although a fee based upon the number of credit hours awarded as the result of the examination was charged by 4 (24%) of the institutions.

21. The competency examination program was considered economical by 13 (76%) of the respondents.

22. Competency examinations were considered relatively easy to administer by 12 respondents (71%) whereas 4 respondents (24%) did not consider them so. Many states indicated that the written test was much easier to administer than the performance test.

23. All states surveyed indicated that they considered their competency examinations objective, particularly the written phase of the test.

24. Eleven respondents (65%) indicated validity had been established for their competency examinations and 4 respondents (24%) stated it had not been established.

25. Reliability of the competency examinations had been established according to 10 (59%) of the respondents, however 5 respondents (29%) indicated this quality had not yet been determined.

26. The opinions were divided evenly as to whether a national, standardized competency examination program was considered feasible; 8 respondents (47%) indicated that they felt so and 8 (47%) did not share this feeling.

27. Twelve respondents (71%) indicated that teacher reactions toward the use of competency examinations for credentialing vocational-technical teachers was favorable.

28. In states using competency examinations for the certification of vocational-technical teachers, 10 respondents (59%) indicated the examination was used for initial entry of full time teachers.

29. Eight respondents (47%) indicated the decision of accepting or rejecting a potential teacher was based upon norms in the form of a minimum of correct responses or a given percentage of correct answers or performances on the competency examinations.

30. Only 2 respondents (12%) indicated that for certification, a specific competency examination score and a given number of years of work experience were equated. Those cases where such a comparison was made allowed up to 2 years of work experience as the result of a persons competency examination score.

31. Teachers who were certified via competency examinations were required to take teacher preparatory courses according to 9 respondents (53%) whereas no such requirement was made by 4 respondents (24%).

32. Competency examinations were reported to contain only items that were directly related to skill or knowledge of the specialties by 10 respondents (59%) while 5 respondents (29%) said that their competency examinations contained items related to other teacher competencies as well. Only 1 response was received to the second part of the question asking what percent of the questions on the examination involved other than skill or knowledge related items, it indicated 30%.

33. When competency examinations were used for awarding of college credit, 4 respondents (24%) indicated that they allowed a given amount of credit for successful completion of each phase of the examination.

34. The range of the maximum credits, in semester hours, allowable in each service for successful completion of a competency examination was:
    a. Technical - 4 2/3 to 42 2/3 with a mean of 24 for the 11 institutions testing in this service.
    b. T & I - 4 2/3 to 42 2/3 with a mean of 24 for the 13 institutions testing in this service.

c. Business and Office Education - 28 credits were allowed at one institution.
d. Distributive Education - 28 to 42 2/3 with a mean of 35 for the two institutions testing in this service.

35. Six respondents (35%) indicated that the credit hours allowed for successful completion of their competency examinations were treated as resident credit but no tuition was charged the candidate whereas, resident credit allowed by 4 respondents (24%) carried a tuition fee.

36. In order to be eligible to take a competency examination, 6 respondents (35%) reported candidates must have successfully completed "X" number of credit hours toward a degree in vocational education whereas 8 respondents (47%) reported a minimum of at least "X" number of years of work experience was required. The range of required credits ran from 2 to 90 and the range of required years of work experience ran from 1 to 8 years.

CONCLUSIONS

There appears to be an increasing interest in the use of competency examinations as indicated by the intent of 7 states to begin using testing programs within the next 2 years.

There does not appear to be any clear-cut reason as to why competency examinations have been discontinued by the 5 previous users.

The use of competency examinations is spreading from the traditional services of Technical and T & I to include Business and Office Education, Distributive Education and Health Occupations.

The task of up-dating the questions contained in the competency examinations appears to be the greatest problem with the programs.

Fees were charged for taking a competency examination by about 2/3 of the states.

Competency Examinations, for the most part, are not used to determine the amount of work experience that will be alloted towards a teachers certification.

REVIEW OF LITERATURE

Studies conducted by Shaefer (1959), Lauda (1966) and Kanzanas and Kieft (1966) revealed information which is paralleled by some of the responses obtained in this study and on which some comparisons may be made.

A trend may be seen by comparing the findings of Shaefer in 1959 in which he identified 16 states using competency examinations followed by Kazanas and Kieft in 1966 as 11 states were identified and then this study which again identified 16 states.

Work experience requirements to be met before a person was allowed to take a competency examination in T & I ranged from 0-8 years with a mean of 4.4 years. Lauda found 37.4 months to be the mean. Lauda polled 22 institutions but only received specific data from 17 of the group. He apparently received his data in months as opposed to data in years that was obtained from the 17 individuals polled in this survey.

Concerning the number of college credits allowed via competency examination, Lauda found the range to be from 4 to 50 and refered to the credits as "regular credit credits" rather than converting them to one common denominator. This study found a range of 4 2/3 to 42 2/3 semester hours.

The credits allowed as the result of successful completion of a competency examination were frequently treated as resident credit. This also showed up in Lauda's study. Likewise, in most instances there was

no tuition charges for this credit.

Written and performance were the most popular types of tests. These tests were found to be used singly, together and in combination with oral examinations. Data from this study showed a combination of all three types of tests was most often used, however, this study did not find any states using only oral tests as was indicated by Lauda's findings. Similarly, this study found that 1 state used only the performance test where Lauda's study indicated the performance test was not used singly.

TABLES

Table I gives the complete tabulated results for the first questionnaire while table II gives the same results in percentage of responses to each item.

Tables III through XI give the tabulated results from the second questionnaire. The items included in the tables do not necessarily follow the same order found in the questionnaire as they have been grouped under compatible headings.

TABLE I
COMPETENCY EXAMINATION USE
(Numbers)

Item	Utilization			Reasons For Discontinuing Use				Services				Type of Examination Used				Examination Used For		
	Yes	No	Undecided	Unreliable	Too Expensive	In-Valid	Other	Tech	T&I	BO&E	Other	Written	Performance	Oral	Combination	Credentialing	College Cr.	Other
Extent of present use	16	37	.															
Has state ever used	5	31																
Does state plan to use	7	23																
Why state discontinued using examinations				1	1	1	2											
For states now using, what services involved								12	16	2	1							
If testing planned, in what services								5	8	3	1							
Type of test used												7	6	1	8			
What present tests are used for																8	12	.
What future tests will be used for																5	6	.

Note: Data based on 53 returned questionnaires.
* "Other" reasons were: 1. Because of an agreement between the Board of Education and the teachers [illegible]ion.
2. Too cumbersome to administer.

TABLE II
COMPETENCY EXAMINATION USE
(Percentages)

Item	Utilization			Reasons For Discontinuing Use				Services				Type of Examination Used				Examination Used For		
	Yes	No	Undecided	Unreliable	Too expensive	Invalid	Other*	Tech	T&I	BO&E	Other	Written	Performance	Oral	Combination	Credentialing	College Cr.	Other
Extent of present use	30	70	.															
Has state ever used	9	59																
Does state plan to use	13	43																
Why state discontinued using examinations				2	2	2	4											
For states now using, what services involved								23	30	4	2							
If testing is planned, in what services								9	15	6	2							
Type of test used												13	11	2	15			
What present tests are used for																15	23	0
What future tests will be used for																9	11	0

Note: Data based on 53 returned questionnaires.
* Other reasons were: 1. Because of an agreement between the Board of Education and the teachers union.
2. Too cumbersome to administer.

TABLE III

GENERAL COMPETENCY EXAMINATION REQUIREMENTS, EXTENT OF USE & ADMINISTRATION

Services	Number of Exams Given Each Year			Fields of Service Covered By Exams			Years Of Work Exp. Required Before Exam Is Given**			Administered By			
	Avg.	High	Low*	Avg.	High	Low*	Avg.	High	Low*	Teacher Trainer	Rep. From Bus & Ind.	Both	Other
Technical	26	50	1	8	60	1	3	7	2	2	-	2	3
T & I	72	600	2	20	70+	2	4	8	2	6	-	3	4
B & OE	2	2	2				2	2	1	1	-	-	-
DE	5	8	2				-	-	-	2	-	-	-
Others	-	-	-				4	7	2	-	-	-	1

* The numbers listed are the lowest numbers reported. Some responses indicated "0" in some services.

** Some returns reported "X" years beyond the learning period. For computation the following average length for learning periods in each service was used: (1) Technical - 3 years, (2) T & I - 5 years, (3) B & OE - 1 year, and (4) DE - 1 year.

TABLE IV

RESPONSES OF RESPONDENTS AS TO THE WORTH OF THE EXAMINATIONS

Question	Yes	No
Are the examinations economical?	13	3
Are the examinations easy to administer?	12	4
Are the examinations objective?	13	-
Have determinations been made as to validity?	11	4
Have determinations been made as to reliability?	10	5
Do you believe a national competency examination program would be feasible?	8	8

TABLE V

PROBLEMS ENCOUNTERED WITH THE PROGRAM

Problem	Frequency
Up-dating	9
Developing examinations	4
Scheduling	4
Cost	3
Establishing validity and reliability	3
Time	2
Covering the field	2

TABLE VI

OPERATION OF THE COMPETENCY EXAMINATION PROGRAMS

	Years																			
	Average	Longest	Shortest	1 Year	2 Years	5 Years	Other	Total	Proportion of total	Extra with pay	Extra without pay	Part of Teach. Load	Paid "X" Per Exam	No. Comp.	Other	Credit Hours	Flat Rate	Cost of Examination	Cost of Exam Plus Admin.
Examination program has been used for	21	50	1																
On the average, exams are up-dated				3	1	7	5												
Examinations directors duties in relation to his total load								2	10	3	3								
Pay for others helping with the exam program is based on												4	8	4	1				
The fee charged for taking the exam is dependent upon																4	3	3	3

TABLE VII

USE OF COMPETENCY EXAMINATIONS FOR CERTIFICATION

Item	Yes	No	Teacher Reactions			When		Who				Years		
			Fabor-able	Uncon-cerned	Unfav-orable	Init-ial Entry	Re-new-al	Full-Time	Adult or Evening	Other Part Time	Others	Avg.	High-est	Low-est
Questions on exams are strickly skill or trade knowledge related	10	5												
Teachers feelings concerning certification via examination			12	3	-									
Courses are required to maintain certification	9	4												
Used for						13	6	13	4	2	1			
A given score equated to "X" years of work experience	2	13												
Maximum years of work experience alloted for examination												2	2	2

TABLE VIII

CERTIFICATION OF POTENTIAL TEACHERS

Question	Criteria for Decision		
	Min. Score or Percentile	Opinion of the Exam Committee	Individual Standards
The decision to certify or reject a candidate is based on:	7	3	1

TABLE IX

DETERMINERS FOR THE AMOUNT OF COLLEGE CREDIT ALLOWED

Question	Basis On Which Credit Is Allowed		
	"X" Amt. of Cr. Plus Grade Of A,B or C If Pas.	"X" Amt. of Cr. For Each Part Of Exam Passed	Cr. Based Upon Score Obtained On Examination
Amount of credits earned via competency examination is determined by	3	4	3

TABLE X

USE OF COMPETENCY EXAMINATIONS FOR AWARDING COLLEGE CREDIT

	Maximum College Credits Allowable*			College Credits Treated As			Persons Eligible to Take A Competency Examination			
	Ave.	High.	Low	Resident Cr. With Tuition	Resident Cr.Without Tuition	Trans-fer Credit	Yes	Years Or Credits* Ave.	High	Low
Technical	24	42 2/3	4 2/3							
T & I	24	42 2/3	4 2/3							
B & OE	28	28	28							
DE	35	42 2/3	28							
Successful Completion of a competency examination yields				4	6	3				
Any student in vocational ed. with previous work experience							3			
Only those students with "X" cr. from the institution & working towards a degree in voc. ed.							6	52*	90*	2*
Only those students with "X" years of work experience.							8	5	8	1

* All credits are "semester" hour credits. Those reported in "quarter" hour credits were converted at the ratio of 1 semester hour equal to 1.5 quarter hours.

TABLE XI

WHO EVALUATES THE COMPETENCY EXAMINATIONS

Title Or Position of Evaluator	Nature of Examination			Total	Rank
	Objective	Subjective	Performance		
Teacher Trainer	7	3	2	12	1
Committee or team	3	4	4	11	2
Trade instructor(s)	2	2	4	8	3
Rep. from State dept.	2	2	2	6	4
Rep. from bus. or ind.	1	1	3	5	5
Administrator	-	2	1	3	6
Clerical Help	1	-	-	1	7
*Machine scored	1	-	-	1	8
Rep. from labor	-	-	1	1	9
Department Head	-	-	1	1	10

* One respondent indicated that their examinations are machine scored. Undoubtedly someone would evaluate the examination after the scoring.

APPENDICES

First, are copies of two questionnaires that were used for the study. They follow in the order in which they were sent out. Following the questionnaires are the letters of transmittal.

APPENDIX A

Colorado State University
Fort Collins, Colorado 80521

PLEASE RETURN TO: Dr. Milton E. Larson
Department of Vocational Ed.

COMPETENCY TESTS - - A SURVEY OF USE AND APPLICATION

This form is being sent to all State Directors of Vocational Education to ascertain the status of competency testing in such areas as Technical, Trade & Industry and Business and Office Occupations. Your prompt cooperation in completing and returning this form will be appreciated. A stamped, self-addressed envelope is provided for your convenience.

****

DIRECTIONS: Please respond to each item by checking or writing in your response as required.

PART I

1. Does your state presently administer any type of competency tests to Vocational teachers?
   ( ) 1 - Yes (If answer is Yes, please answer only Parts I & IV)

   ( ) 2 - No (If answer is No, please answer only Parts II & IV)

   ( ) 3 - Uncertain (If answer is Uncertain, please answer only Parts III & IV)

2. The competency test(s) used are:

   ( ) 1 - Written
   ( ) 2 - Performance
   ( ) 3 - Oral
   ( ) 4 - Combinations of above

3. In what service areas are the competency tests given?

   ( ) 1 - Technical
   ( ) 2 - Trade & Industry
   ( ) 3 - Business and Office Occupations
   ( ) 4 - Others (Please specify) _____

4. The results of this test are used for:

   ( ) 1 - Credentialing new teachers
   ( ) 2 - A means of determining college credits for work experience in the teacher training program
   ( ) 3 - Other (Please specify) _____
   _____

5. Who in your state administers these tests or from whom can additional information be obtained?

   Name: _____
   Position: _____
   Address: _____
   _____
   _____

Part II

6. If your state is not now using competency testing for purposes as indicated in question 4 above, has your state ever used a competency test?

( ) 1 - Yes
( ) 2 - No

7. If your answer to question 6 was Yes, the tests were abandoned because they were:

( ) 1 - Invalid
( ) 2 - Unreliable
( ) 3 - Too expensive
( ) 4 - Other (Please state reason) _____
_____

8. If your answer to question 6 was No, is there any plan to use competency tests during the next year or two?

( ) 1 - Yes
( ) 2 - No

9. If your state plans on using competency tests in the next year or two, will the test be used for determining:

( ) 1 - Certification of teachers
( ) 2 - Amount of credit given for work experience in teacher training programs
( ) 3 - Other (Please state use) _____
_____

10. In what service areas do you plan to use the competency test(s)?

( ) 1 - Technical
( ) 2 - Trade & Industry
( ) 3 - Business and Office Occupations
( ) 4 - Other (Please specify) _____
_____

Part III

11. For information relative to use of competency tests, contact the individual named

Name: _____
Position: _____
Address: _____
_____

Part IV

12. I would appreciate receiving a copy of the report of the findings of this study if one is published.

( ) Name: _____
Position: _____
Address: _____
_____

FORM _____

APPENDIX B

Colorado State University
Fort Collins, Colorado 80521

Please Return to: Dr. Milton E. Larson
Dept. of Vocational Ed.

COMPETENCY EXAMINATIONS: A SURVEY OF EXTENT OF USE

This follow-up questionnaire is being sent to the person in charge of competency examinations in those states where the state directors indicated that they were used. Your prompt cooperation in completing and returning this form will be appreciated. A stamped, self-addressed envelope is provided for your convenience.

****

DIRECTIONS: This form is divided into 3 parts: Part I with General questions, Part II on certification of teachers, and Part III deals with the allowing of college credit for work experience. Please complete the General section and either the Part II on certification or the Part III on college credit, or both, depending on the extent to which your state uses competency examinations. Please respond to each item by checking or writing in your response as required.

Part I General

1. Approximately how many competency examinations are administered each year in the following services and who administers them? (estimate numbers if data is not readily available)

( ) Technical	( ) Teacher Trainer	( ) Rep. from Bus & Ind	( )Both	( ) Other
( ) T & I	( ) Teacher Trainer	( ) Rep. from Bus & Ind	( )Both	( ) Other
( ) B & O d.	( ) Teacher Trainer	( ) Rep. from Bus & Ind	( )Both	( ) Other
( ) D E	( ) Teacher Trainer	( ) Rep. from Bus & Ind	( )Both	( ) Other
(others)				
( ) _____	( ) Teacher Trainer	( ) Rep. from Bus & Ind	( )Both	( ) Other
( ) _____	( ) Teacher Trainer	( ) Rep. from Bus & Ind	( )Both	( ) Other

2. If there is a minimum nuber of years of work experience required before a person is allowed to make application for a competency examination, please indicate below.

_____ Years for Technical	_____ Years for other	_____
_____ Years for T & I	_____ Years for other	_____
_____ Years for B & O Ed.	_____ Years for other	_____

3. Please, briefly list those problems that you feel are most frequently encountered while maintaining a functional competency examination program such as you have in your state.

_____

_____

_____

_____

4. For how many years has your state been using competency examinations for vocational technical education? (estimate number of years if exact data is not readily avail.)

_____ Years

5. In approximately how many areas of each of the following services are competency examinations administered?

_____ Technical _____ T & I

6. On the average, competency examinations are up-dated

( ) every year
( ) every other year
( ) at least every 5 years
( ) other (please specify) _____

7. In your state what group or person develops the competency examinations? (check all that apply)

( ) Teacher trainer in the area
( ) Representatives for Bus & Ind
( ) Applicant in lieu of taking exam
( ) Representative from labor
( ) A combination of above
( ) Other (please specify) _____

8. Is the same person or group that developed the examinations used to up-date them?

( ) Yes ( ) No ( ) Sometimes
If answer is No, please indicate who does the up-dating _____

9. As the person in your state responsible for the administration and use of competency examinations, this responsibility is
( ) a full or total assignment
( ) a proportionate part of your total assignment
( ) extra with compensation
( ) extra without compensation

10. How are persons, other than yourself, who give or administer the competency examinations paid for their time and efforts?

( ) It is considered part of the teacher trainers load
( ) Compensated a fixed amount per examination
( ) There is no compensation
( ) Other (Please state) _____

11. Who (title or position) is responsible for evaluation of the following parts of the competency examination?

Objective _____
Subjective _____
Performance _____

12. If a fee is charged the person for taking the competency examination, what is the basis for the fee?

( ) Credit hours acquired
( ) Nature of examination
( ) Cost of examination
( ) Cost of examination and administration
( ) Other (please state) _____

13. Do you believe the results of this testing indicate that your competency examinations are:

Economical? ( ) Yes ( ) No ( ) How determined? _____

_____

Relatively easy to administer? ( ) Yes ( ) No ( ) How determined? _____

_____

Objective? ( ) Yes ( ) No ( ) How determined? _____

_____

14. Have determinations been made as to:
Validity? ( ) Yes ( ) No ( ) How determined? _____

_____

Reliability? ( ) Yes ( ) No ( ) How determined? _____

_____

15. Do you believe that a national, standardized competency testing program would be feasible?
( ) Yes ( ) No

16. ( ) I desire a copy of the findings of this study if one is published.

Part II Credentialing Teachers

1. How do teachers react to taking a competency examination used for credentialing?

( ) Favorable ( ) No concern ( ) Unfavorable

2. In your state, competency examinations are being used for: (Please answer both A&B)

A.	B.
( ) Initial entry into teaching	( ) full time teachers
( ) Periodic renewal of certification	( ) teachers of adult or evening classes
	( ) other part-time teachers (not substit.)
	( ) others (Please state) _____

3. What formula or basis is used to translate the competency examination scores into a decision resulting in a teacher being accepted or rejected? (Please state)

_____

_____

_____

4. Is a certain percentile or minimum score obtained on a competency examination used in lieu of a predetermined number of years of work experience?
( ) Yes ( ) No
If yes, what is the maximum number of years allowed toward certification requirements? _____

NOTE: If this varies for different services please indicate below training requirements of each service and the amount allowable via competency examination _____

_____

_____

_____

5. Are any teacher preparatory courses required to retain a teaching certificate once it has been established as a result of a person's performance on a competency examination?

( ) Yes ( ) No

6. Have the items on your competency examinations been strictly skill or knowledge related or have you used questions concerning other teacher competencies such as methods, guidance, etc.?

( ) Yes ( ) No ( ) To some extent

If answer is other than NO, approximately what percent of the total test deals with topics other than trade related? _____%

Part III Awarding of college credit for work experience.

1. What formula or basis is used to convert competency examination scores into grades or quality points for academic records? (Please state)

_____

_____

_____

_____

_____

_____

2. What is the maximum number of college credits allowable, in each of the following services, for successful completion of a competency examination?

Technical _____ DE _____
T & I _____ (Other)_____
B & O Ed. _____ (Other) _____

3. The credit hours allowed for successful completion of a competency examination are treated as:

( ) resident credit for which tuition is then charged
( ) resident credit for which no tuition is charged
( ) transfer credit

4. Competency examinations are administered to:

( ) any student seeking college credit in vocational education as a result of previous work experience.

( ) those students who have successfully completed ____ (Please specify) credit hours or more class work at the institution leading towards a degree in vocational education

( ) those students who have had at least ____ (Please specify) years of previous work experience

COLORADO STATE UNIVERSITY

FORT COLLINS, COLORADO 80521

DEPARTMENT OF VOCATIONAL EDUCATION

APPENDIX C

The Vocational Education Department at Colorado State University in cooperation with the Research Coordinating Unit has initiated a study aimed at identifying the status and use of competency studies in Vocational Education.

A common requirement in several service areas is, of course, work experience. This requirement can be met in a number of ways, some of which provide a broad, general background for a teacher and others which may be quite limited. The competency test is one means that has been used in an effort to identify deficiencies in the work experiences of applicants.

Your help in filling out the enclosed questionnaire will be greatly appreciated and it is hoped that the outcome of this study will be beneficial to all vocational education departments.

Our present plans include a report of the findings of this study. Should you desire a copy, please check Item 12 on the form.

Thank you for your cooperation.

Sincerely,

Dr. Milton E. Larson
Professor of Vocational Education

MEL/ms

Enclosure

COLORADO STATE UNIVERSITY

FORT COLLINS, COLORADO 80521

APPENDIX D

DEPARTMENT OF VOCATIONAL EDUCATION

The Vocational Education Department at Colorado State University in cooperation with the Research Coordinating Unit has initiated a study aimed at identifying the use of competency examinations in Vocational Education.

An earlier form which was sent to all State Directors of Vocational Education to determine which states used competency examinations and who was in charge of the testing in those states.

Your help in filling out the enclosed questionnaire will be greatly appreciated. It is hoped that the outcome of this study will be beneficial to all vocational education departments.

Our present plans include a report of the findings of this study. Should you desire a copy, please check item 16 on the questionnaire.

Thank you for your prompt cooperation.

Very truly yours,

Dr. Milton E. Larson
Professor of Vocational Education

MEL/ms

Enclosure

BIBLIOGRAPHY

Bohn, Ralph C., "Teaching Competencies," Industrial Arts and Vocational Education, 54, No. 6 (June, 1965), 22.

Three avenues are described to help keep teachers current on industrial advancements and changes. Suggestions for in-service education, increased supervision, and improved teacher education programs are elaborated on.

Feirer, John L., "Occupational Experience For T&I Teaching," Industrial Arts and Vocational Education, 57, No. 2 (February, 1968), 19.

This article discusses the need to reorganize our certification standards and be more realistic. The author suggests that the requirement of a fixed number of years of trade experience be abolished, realistic trade performance and related tests be developed and desired or needed teacher competencies need to be re-evaluated.

Griess, Jerald. Feasibility of Providing Trade Competency Examinations For Teachers on a National Basis. Final Report on Project No. 5-0043 Contract No. OE-5-85-110, New York State Education Department, Contract No. C-0093. The Department of Vocational-Technical Education, Graduate School of Education, Rutgers - The State University, New Brunswick, 1967.

Selected persons from around the country that were involved with teacher preparation and certification were called together for two one-day sessions to discuss the problem of obtaining high quality vocational-technical teachers. Problems involved in developing, administering and up-dating competency examinations were discussed as well as the types of tests applicable to such a program. Recommendations were made but no actual national program was started due to a lack of funds.

Kazanas, H. C., and Kieft, L. D., "To Determine More Effective Vocational Teacher Certification Procedures In Michigan By Competency Examination," School Shop, XXVI, No. 5 (January, 1967), 26-29.

The shortage of qualified vocational teachers is discussed and many benefits to vocational education are listed which could result from a competency testing program. The results of a survey sent to State Directors seeking information on the attitudes toward and the use of competency examinations are included.

Kynard, A. T., "Checklist For Evaluating the Work Experience of New Trade and Industrial Teachers," American Vocational Association Journal, 39, No. 3 (March, 1964), 21.

A suggested check list is outlined for administrators to use when evaluating a prospective teacher. Eighteen qualifications or characteristics are listed to be evaluated "strong", "average", or "weak".

Lauda, Donald P. Factors Related to the Granting of College-University Credit for Trade and Industrial Experience in Institutions Offering Industrial Education. A report on a Ph. D. Thesis, Iowa State University, Ames, 1966.

This study deals entirely with the use of competency examinations as a means of allowing college creidt for previous trade or work experience. The survey findings, from data collected in those states who were at that time involved with such a program, implications and recommendations to the states who may be anticipating future use of such a program is contained in the report.

Ohio State Department of Education. Occupational Competency Tests, Procedures and Instructions for Construction and Revision. A report of the Ohio Trade and Industrial Education Service, Division of Vocational Education, State Department of Education, Columbus, 1962.

Competency examinations are described as to their scope, nature, general policies of application, test development procedures and test controls. Ideas on test construction, administration and scoring are listed as well as examples of items that might be included on various tests.

Stockwell, Richard E., "Unrest in the School Shop," Industrial Arts And Vocational Education, 57, No. 4, (April, 1968), 66.

There often exists a climate of Industrial Arts versus Vocational Education rather than Industrial Arts and Vocational Education. This split grows out of practices such as vocational credentialing requirements, the amount of professional teacher preparation required, the use of out-dated competency examinations and reimbursement procedures.

Walsh, John, Teacher Competencies in Trade and Industrial Education. No. OE-84006, Washington: U.S. Government Printing Office, 1960.

A list of 107 T & I teacher competencies was developed and refined by a national jury. These competencies were then ranked by several groups involved with T & I education. The list of competencies, their ranking and the implications suggested by such ranking is given in the report.